

STATE OF MAINE
PUBLIC UTILITIES COMMISSION

Docket No. 97-393(II)
January 8, 2002

NORTHERN UTILITIES, INC.
Request for Approval of Rate
Design and Partial Unbundling
Proposal – Tariff Issues

ORDER

I. SUMMARY

We approve Northern Utilities, Inc.'s (Northern) proposed revised rate schedules and terms and conditions of service and close this docket. We will further investigate the reasonableness of Northern's billing algorithm in another proceeding.

II. BACKGROUND

On April 17, 1998, Northern filed for approval of comprehensive rate design and rate class changes for its customers. On May 5, 1999, Northern and the OPA filed a Stipulation for rates to be effective November 1, 1999. On May 11, the Commission held a hearing on the Stipulation. A ratepayer intervener, Robert Hains, attended the hearing and raised numerous issues regarding Northern's existing tariffs that had not been raised previously in the case. Mr. Hains, who had not participated in the settlement process, confirmed that he had no objections to the negotiated rate design Stipulation. At the invitation of the Commission, Mr. Hains filed on May 18 written comments about various provisions contained in Northern's terms and conditions of service with which he disagreed. Northern responded to Mr. Hains's comments on May 25 and the OPA responded on May 27. On May 28, 1999, we deliberated and approved the stipulation and considered Mr. Hains's issues individually, designating what, if any, further steps we required on each point.

The Part I Order approving the stipulation was issued on September 3, 1999. The Order did not address issues raised by Mr. Hains's that were unrelated to the stipulation itself. On April 11, 2001, the Commission issued a Part II Order addressing all of Mr. Hains's points and requesting further comment and analysis from Northern on certain issues. On May 24, Northern filed its response to the Part II Order with the Commission and provided copies to parties to the case. Included in its filing were several proposed, revised rate schedules addressing issues raised by Mr. Hains and other matters discussed by the Commission.

An Examiner's Report was issued on August 9, 2001. Northern filed exceptions to the report on August 24, 2001 contending that its bill estimation algorithm does not require further analysis as suggested in the report. At our September 10, 2001 deliberative session, we decided to hold open the question of the accuracy and reasonableness of Northern's estimated billing algorithm.

We directed Staff to have Northern conduct a manageable bill comparison sampling and to reschedule the matter for further deliberation. The Staff issued an Advisor's Data Request on September 14, 2001 for response on October 5, 2001 and a follow up Data Request on November 15, 2001 to which Northern responded on November 26, 2001. Staff issued a Supplemental Examiner's Report – Estimated Billing Algorithm on December 5, 2001. No exceptions were filed. We deliberated this issue on December 17, 2001.

III. DISCUSSION

We concluded that the following issues in the Part II Order required no further action or consideration, either because we rejected Mr. Hains's position, or because Northern filed proposed revised rate schedules and terms and conditions to resolve the issue:

1. Editorial corrections to the stipulation
2. Gas supply items in base rates
3. Low-income programs
4. 12-month service assumption (Second Revised Page 6)
5. Late payment charges (Second Revised Page 6 and Second Revised Page 6.1)
6. Meter location change frequency
7. Rate class determination (Second Revised Page 5)
8. Bi-monthly billing of non-heating customers (Second Revised Page 6)
9. Refund timing
10. Refund statement
11. Emergency Response

We required further review or action from Northern on four general tariff issues raised by Mr. Hains: 1) the process by which Northern assigns customers to rates classes and whether any types of customers might be disadvantaged by it; 2) Northern's policies and practices relating to providing temporary service; 3) who should pay for repair or replacement of damaged outdoor gas meters; and 4) the reasonableness of Northern's use of estimated meter reads, including Northern's algorithm. We address each of these issues below.

A. Occupant Billing

Mr. Hains proposed to modify Northern's Residential tariff to allow rental property accounts held in the landlord's name to be charged the residential, rather than a commercial, rate. Mr. Hains argues that Northern's distinction between landlord-held and occupant-held residential service accounts "results in inconsistency and inequity." Northern contends that when one person is the customer of record on behalf of another resident, it is appropriate to presume a business arrangement and apply a commercial rate.

In the Part II Order, we stated that we were interested in examining the way in which Northern assigns customers to rate classes and the extent to which customers of a particular type might be disadvantaged by it, including the situation raised by Mr. Hains. We directed Northern to provide information describing its practices for assigning customers to rate classes, in particular for apartment accounts.

In its response to the Part II Order, Northern states that

[a]ccording to the cost studies filed with Docket No. 97-393, Northern's residential customers benefit from a subsidy provided by other commercial and industrial customer classes. Northern's tariff prevents landlords who include utility bills with their rent charges from receiving the same advantage offered to residential customers.

In addition, Northern asserts that the difference between a residential heating customer's bill and a small commercial customer's bill is relatively small (e.g., for 100 ccfs in January a residential customer's bill is \$118.15 and a small commercial customer's bill is \$125.24, a difference of 6%.)

In the situation before us, we find that Northern's policy of presuming a commercial relationship and thus applying the commercial rate for accounts held on behalf of another person is reasonable in light of the small difference between residential and commercial charges. We concur with Northern's contention that the difference in charges for apartment accounts held by the tenant and those held by the landlord is not substantial. Indeed, the difference in monthly bills for all usage levels appears to be largely explained by the difference in the customer charge (a difference of \$5.51). Consequently, we find this aspect of Northern's rate design to be reasonable.

With respect to the assertion that residential customers benefit from a subsidy, we note that while Northern's statement may represent its view concerning the basis for the current rate structure, current rates were negotiated without agreement on that specific issue. Staff contends that it is not clear that a subsidy existed in the 1998 rate design case or, if it did, that it still exists today. Absent concurrence among the parties on this point, a full rate design case analysis and a Commission determination would be required to resolve whether a subsidy exists.

On balance, we conclude that Northern's rate classification tariff is reasonable and does not require further Commission attention at this time.

B. Temporary Service

The Part II Order points out that Northern's tariff addresses temporary service installations in two separate sections and that inconsistencies

between these sections may cause customer confusion. To remedy this, Northern has agreed to omit the following statement from Page 7 of its tariff: "The Company shall not be required to install service(s) where the business to be secured will not be of reasonable duration." The Company will retain the following paragraph on Page 5 of its tariff regarding temporary service:

"Where service under the rate schedules is to be used for temporary purposes only, the Customer may be required to pay the cost of installation and removal of equipment required to render service in addition to payments for gas consumed. Said costs of installation and removal may be required to be paid in advance of any construction by the company."

The changes proposed by Northern will alleviate any customer confusion that may have been caused by the conflicting passages. Therefore, we will allow this change, appearing on First Revised Page 7 of its revised schedules, to go into effect.

C. Damaged Outdoor Meters

In the Part II Order, we directed Northern to comment on whether the affected customer or all ratepayers should pay for damage to Northern's outdoor meters. The current tariff language assigns the entire cost responsibility to the affected customer whether the customer could control the damage or not. The Company agrees with the Commission that certain costs should be borne by all ratepayers. Northern proposes to replace its current tariff language with the following (from the Company's Massachusetts tariff):

All meters, services and other gas equipment owned by the Company shall be and will remain the property of the Company, and no one other than an employee or authorized agent of the Company shall be permitted to remove, operate, or maintain such property. The Customer shall not interfere with or alter the meter, seals or other property used in connection with the rendering of service or permit the same to be done by any person other than the authorized agents or employees of the Company. The Customer shall be responsible for all damage to, or loss of, such property unless occasioned by circumstances beyond the Customer's control. Such property shall be installed at points most convenient for the Company's access and service and in conformance with public regulations in force from time to time. The costs of relocating such property shall be borne by the Customer when done at the Customer's request, or for the Customer's convenience, or if

necessary to remedy any violation of public law or regulation caused by the Customer.

Northern's proposed Second Revised Page 8.

The changes proposed by Northern appear reasonable and fair to customers, and we will allow them to go into effect.

D. Estimated Billing Algorithm

1. Background

The Part II Order asks Northern to address whether its billing algorithm is equitable, particularly with respect to estimated usage. The Order states:

Could a customer be overcharged due to Northern's method of calculating estimated usage or of reconciling actual and estimated usage for consecutive months? Northern should determine whether its algorithm could charge customers more than warranted given the volume step rate differentials that exist in its rates. If so, Northern may be required to change its manner of adjusting its estimated billings to actual readings. We include this as an additional item on which Northern should provide comment and analysis.

Part II Order at 12.

According to Northern, only slight differences in billing amounts over multiple month billing periods could result from estimated monthly usage that does not represent actual usage. Further, Northern contends that those differences would be arbitrary and would result in slightly *higher or lower* total billed amounts. Northern admitted that the difference may be slightly more pronounced when bills are based on estimated usage for months that cross over seasons.

Northern's response also includes specific details about the mechanics of the algorithm, with examples of how the algorithm works. However, Northern did not provide enough information to determine definitively whether the algorithm does a reasonably good job of estimating bills or if there is any systemic bias.

Based on the experience of our Consumer Assistance Division (CAD), it does appear that most billing problems recently reported to the PUC, and certainly the most egregious errors, have been caused by a change to Northern's billing system that was made in July 2000 that was not directly related to the algorithm. Many of the errors went unnoticed for several months. CAD

worked with Northern to untangle the incorrect bills as customers became aware of them and thoroughly reviewed Northern's customers' bills to ensure that all overcharges were remedied. Northern claims that the billing system program has now been corrected. The CAD confirms that between July 2000 and March 2001 there were a significant number of complaints about Northern's billing, but that the number of complaints has declined over the last several months to lower levels. However, it remains to be seen whether the current system will work well during a heating season.

Despite the current lower numbers of complaints being received at the Commission, and the recent oversight and close scrutiny by CAD, we decided at our September 10, 2001 deliberations that we would prefer to have a more precise examination of the algorithm's accuracy. We, therefore, directed Staff to have Northern compare a sample of customer accounts where actual reads were done six months apart with what the algorithm would have produced for estimated bills for the entire time period. We sought to find out what percentage of customers would have been overcharged and what percentage would have been undercharged and by what percentage the bills would have been off for each category, including whether the estimated bills tended to be off in the same direction (higher or lower) each month or whether fluctuations in the bills leveled out over time (some high and some low).

2. Analysis

Northern provided the Staff with an analysis of all actual non-zero meter readings over the 3-year period ending September 20, 2001. This represented about 245,000 individual meter reads. For each, Northern computed what the estimated usage level would have been if an actual read had not been available and provided summary statistics concerning actual usage, estimated usage, and, by extension, the difference between average and estimated usage.

Northern has eight rate categories, but for this purpose, we will limit our attention to the two residential categories (R01 and R02) and the non-residential classes with the largest number of customers, G40 (medium use, low load factor) and G50 (low use, low load factor). These four categories account for about 96% of the meter readings.

Northern's analysis shows that, on average, its billing estimation process does a reasonably good job. For example, for residential space heat (R02) customers, the average actual monthly use is 69 CCF while the average estimated use is 67 CCF. The other classes also showed fairly close agreement between the average actual and estimated use, with a slight tendency to overestimate use for two of the four classes and a tendency to underestimate for the other two.

However, one cannot look only at the difference between the average actual and estimated usage. Customers are more concerned with whether their own estimated bills are reasonably accurate. We would not expect

an individual customer to accept his estimated bill being \$500 too high simply because another customer's bill was \$500 too low. For this reason, we also need to look at the size and frequency of relatively large errors.

According to Northern's analysis, for 25% of Residential space heat customers estimated usage exceeded the actual usage by 44% or more.¹ For the other three rate categories, 25% of customers would have seen overestimates of actual usage ranging from 55% to 70%. A number of customers also would have received underestimated bills, although the size of the underestimates tends to be much smaller. In the worst case, 25% of medium non-residential (G40) customers would have seen an underestimate of 19% or more. The largest class (in terms of number of customers), residential heat customers, showed 25% of customers having an underestimate of 17% or more.

In summary, Northern's usage estimates for billing purpose appear reasonably accurate on average, but can still produce relatively large errors for individual customers. In particular, the data appear to indicate that about one quarter of customers can be overcharged by 50% or more. This seems to be quite high, although the record in this case does not provide a basis on which to determine whether such potential errors are unreasonable.

3. Conclusion

Because we cannot draw a definitive conclusion on whether these results are reasonable, we will continue our review of Northern's use of the algorithm in another proceeding. Finally, we expect that this is an issue that should be part of a service quality index for Northern should one be adopted.

E. Licensing

In his comments, Mr. Hains argued that Northern's tariff should state that persons working on natural gas facilities on or within the customer's premises should be licensed. In the Part II Order, we declined to require this given our lack of a record on the matter and stated that, should Northern propose to change its tariff to require licensing of persons working on natural gas facilities on the customer's side of the meter, we would require further information. In its responsive filing, Northern did submit a revised tariff page in accordance with Mr. Hains's suggestion, stating that licensing would be required for persons working on the customer's side of the meter. Specifically, Northern submitted a revised tariff, First Revised Page 7, with the following language:

¹For purposes of analysis, the error is defined as (Actual use – Estimated use) / Actual use.

Any person installing or maintaining natural gas piping or equipment beyond the Customer's meter must be licensed by the State of Maine.²

Northern also provided the following explanation for the change:

Maine's laws require that any person installing or maintaining natural gas piping or equipment beyond the meter be licensed by the State of Maine.

Staff requested that Northern provide more information, specifically the law to which it was referring as setting forth the applicable licensing requirements. In response, Northern cited 32 M.R.S.A. § 3302, Chapter 49: Plumbers, which governs plumbing licensing requirements.

However, it appears this statute is not directly applicable because it does not establish a licensing requirement for propane and natural gas installers. Rather, it exempts propane and natural gas installers, licensed under chapter 130, from plumbing license requirements in certain limited situations.³

Our own review suggests that the law that directly governs propane and natural gas installations is Chapter 130 of the Propane and Natural Gas Act. Among other things, Title 32, Section 14807(1)(D) governs license, education, and certification requirements for propane and natural gas "appliance connection and service technicians," defined as persons who install and service propane and natural gas appliances and indoor piping up to 2,000,000 BTUs per appliance.

Consequently, it appears that gas installers for facilities within residences and small commercial establishments are licensed under the Propane and Natural Gas Act, but also have a limited exemption from plumbing licensure that permits them to do associated work on water pipes to allow the technician to set up furnaces and other appliances that require water connections. Taken together, these laws evidently navigate the overlap between work on pipes that

² Northern should refile this tariff replacing the phrase "beyond the Customer's meter" with "on the Customer's side of the meter" to improve clarity.

³ Section 3302(1)(B) exempts plumbing by propane and natural gas installers that are licensed under chapter 130, but the exemption is only applicable "to hot and cold water connections to existing piping in the same room where the installation is taking place and does not apply beyond any existing branch connection supplying water." Section 3302(1)(A) exempts "[p]lumbing by regular employees of public utilities as defined in Title 35-A, section 102, when working as such." It is unclear to what extent this explicit statutory exemption is applicable to the circumstances which give rise to Mr. Hains's concern. However, to the extent it does concern Mr. Hains, we note that it would require a legislative remedy.

carry combustible substances, such as propane and natural gas, and pipes that carry water.

Northern did not directly address the question of whether including this requirement in its tariffs would be controversial in any way. We surmise that to the extent the statutory requirements apply to all technicians installing or servicing gas facilities, there could seem to be no controversy to including this statement in the rate schedule. On the other hand, there would appear to be no necessity either, given that other laws already apply. On the whole, however, we see no harm in having the licensing requirement highlighted in Northern's tariff. The explicit statement might clarify the matter for customers who are not otherwise familiar with Maine law. Consequently, we approve the proposed modification.

IV. CONCLUSION

We approve the following rate schedules and terms and conditions as proposed by Northern in its May 24, 2001 filing: Second Revised Page 5 – Superceding First Revised Page 5; Second Revised Page 6 – Superceding First Revised Page 6; Second Revised Page 6.1 – Superceding First Revised Page 6.1; First Revised Page 7 – Superceding Substitute Original Page 7; Second Revised Page 8 – Superceding First Revised Page 8.

Dated at Augusta, Maine, this 8th day of January, 2002.

BY ORDER OF THE COMMISSION

Dennis L. Keschl
Administrative Director

COMMISSIONERS VOTING FOR: Welch
Nugent
Diamond

NOTICE OF RIGHTS TO REVIEW OR APPEAL

5 M.R.S.A. § 9061 requires the Public Utilities Commission to give each party to an adjudicatory proceeding written notice of the party's rights to review or appeal of its decision made at the conclusion of the adjudicatory proceeding. The methods of review or appeal of PUC decisions at the conclusion of an adjudicatory proceeding are as follows:

1. Reconsideration of the Commission's Order may be requested under Section 1004 of the Commission's Rules of Practice and Procedure (65-407 C.M.R.110) within 20 days of the date of the Order by filing a petition with the Commission stating the grounds upon which reconsideration is sought.
2. Appeal of a final decision of the Commission may be taken to the Law Court by filing, within 30 days of the date of the Order, a Notice of Appeal with the Administrative Director of the Commission, pursuant to 35-A M.R.S.A. § 1320(1)-(4) and the Maine Rules of Appellate Procedure.
3. Additional court review of constitutional issues or issues involving the justness or reasonableness of rates may be had by the filing of an appeal with the Law Court, pursuant to 35-A M.R.S.A. § 1320(5).

Note: The attachment of this Notice to a document does not indicate the Commission's view that the particular document may be subject to review or appeal. Similarly, the failure of the Commission to attach a copy of this Notice to a document does not indicate the Commission's view that the document is not subject to review or appeal.